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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,157	09/24/2003	Satoshi Hiratsuka	YAMA:058	2828
37013 7590 06/13/2007 ROSSI, KIMMS & McDOWELL LLP. P.O. BOX 826 ASHBURN, VA 20146-0826			EXAMINER QIN, JIANCHUN	
			ART UNIT 2837	PAPER NUMBER
			MAIL DATE 06/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,157	Applicant(s) HIRATSUKA, SATOSHI	
	Examiner Jianchun Qin	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/22/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii (U.S. Pat. No. 6346667) in view of Malcolm (U.S. Pat. No. 6798885) and Nakamaru et al. (U.S. Pat. No. 5805545).

With respect to claim 1:

Ishii teaches an electronic musical apparatus comprising: a music playing data extracting device which extracts a MIDI music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given

music work resource, which is in a form of recorded representation of music, including encrypted or unencrypted MIDI or non-MIDI data (cols. 3-4, lines 61-13 and col. 6, lines 3-23); and an automatic music playing device which plays music of said given music work resource based on said MIDI music playing data file (col. 6, lines 17-23).

Ishii does not mention expressly: an encrypting device which encrypt said extracted MIDI music playing data file using an encryption key; a first storing device which stores said encrypted MIDI music playing data file; a decrypting device which decrypt said encrypted MIDI music playing data file from said first storing device using a decryption key which corresponds to said encryption key; and a second storing device which stores the decrypted MIDI music playing data file decrypted by said decrypting device.

Malcolm discloses a method and apparatus for encoding security information in a MIDI data stream, including: an encrypting device which encrypt input MIDI music playing data file using an encryption key (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58); a first storing device which stores said encrypted MIDI music playing data file (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9); a decrypting device which decrypt said encrypted MIDI music playing data file from said first storing device using a decryption key which corresponds to said encryption key (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the invention of Malcolm into the invention of Ishii in

order to provide a simple and reliable technique to enforce anti-piracy security in MIDI information (Malcolm, col. 1, lines 21-40).

Nakamaru et al. disclose a Midi standards recorded information reproducing device (Abstract), including: a storing device which stores decrypted MIDI music playing data file temporarily, before an automatic music playing device plays music based on said MIDI music playing data file (col. 2, lines 42-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ishii to store the decrypted MIDI music playing data file, as taught by Nakamaru et al., in order to make the decrypted MIDI music playing data file tangible and/or re-useable (Nakamaru et al., cols. 2-3, lines 65-5).

With respect to claims 2 and 7:

Ishii teaches a method and a computer program for implementing the method, comprising the steps of: extracting a MIDI music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource, which is in a form of recorded representation of music, including encrypted or unencrypted MIDI or non-MIDI data (cols. 3-4, lines 61-13 and col. 6, lines 3-23); and automatically playing music of said given music work resource based on said MIDI music playing data file (col. 6, lines 17-23).

Ishii does not mention expressly: encrypting said extracted MIDI music playing data file using an encryption key; storing in a first storing device said encrypted MIDI music playing data file; decrypting said encrypted MIDI music playing data file from said

first storing device using a decryption key which corresponds to said encryption key;
and storing in a second storing device the decrypted MIDI music playing data file
decrypted by said decrypting device.

Malcolm discloses a method and apparatus for encoding security information in a MIDI data stream, including: encrypting said extracted MIDI music playing data file using an encryption key (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58); storing in a first storing device said encrypted MIDI music playing data file (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9); decrypting said encrypted MIDI music playing data file from said first storing device using a decryption key which corresponds to said encryption key (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the invention of Malcolm into the invention of Ishii in order to provide a simple and reliable technique to enforce anti-piracy security in MIDI information (Malcolm, col. 1, lines 21-40).

Nakamaru et al. disclose a Midi standards recorded information reproducing device (Abstract), including: storing in a storing device decrypted MIDI music playing data file, before an automatic music playing device plays music based on said MIDI music playing data file (col. 2, lines 42-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ishii to store the decrypted MIDI music

playing data file temporarily, as taught by Nakamaru et al., in order to make the decrypted MIDI music playing data file tangible and/or re-useable (Nakamaru et al., cols. 2-3, lines 65-5).

With respect to claims 3 and 6:

Ishii does not mention expressly: said decrypted MIDI music playing data file stored in said second storing device is deleted or unutilizable after said music playing device has played music of said given music work resource based on said decrypted MIDI music playing data file stored in said second storing device.

The teaching of Nakamaru et al. further includes: said decrypted MIDI music playing data file stored in said storing device is deleted after said music playing device has played music of said given music work resource based on said decrypted MIDI music playing data file stored in said storing device (col. 2, lines 42-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Ishii to store the decrypted MIDI music playing data file temporarily and provisionally, as taught by Nakamaru et al., in order to make the decrypted MIDI music playing data file tangible (Nakamaru et al., cols. 2-3, lines 65-5).

With respect to claims 4 and 5:

Ishii does not mention expressly: said given music work resource is encrypted, and said music playing data extracting device decrypts the encrypted given music work resource before extracting said MIDI music playing data file.

The teaching of Malcolm includes: providing an encrypted music work resource, and decrypting the encrypted given music work resource before extracting MIDI music playing data file (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the invention of Malcolm into the invention of Ishii in order to provide a simple and reliable technique to enforce anti-piracy security in transmitting MIDI information (Malcolm, col. 1, lines 21-40).

With respect to claims 8, 9 and 11:

The teaching of Ishii further includes: said automatic music playing device includes a tone generator that generates musical tone signals based on the MIDI data file (col. 6, lines 17-23).

Ishii does not mention expressly: said MIDI data file is decrypted and stored in a storing device.

The teaching of Malcolm includes: encrypting and decrypting and outputting MIDI music playing data file (col. 2, lines 18-39; cols. 4-5, lines 63-9 and lines 40-50; cols. 5-6, lines 65-9; and col. 6, lines 41-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the invention of Malcolm into the invention of Ishii to encrypt and decrypt said MIDI music playing data file before it is inputted into the tone generator for generates musical tone signals in order to provide a simple and reliable

technique to enforce anti-piracy security in MIDI information (Malcolm, col. 1, lines 21-40).

Nakamaru et al. disclose a Midi standards recorded information reproducing device (Abstract), including: a storing device which stores decoded MIDI music playing data file, before an automatic music playing device plays music based on said MIDI music playing data file (col. 2, lines 42-58).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the invention of Nakamaru et al. into the invention of Ishii in order to make the decoded MIDI music playing data file tangible and/or re-useable (Nakamaru et al., cols. 2-3, lines 65-5).

Allowable Subject Matter

4. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claim 15 is allowed.

Reasons for Allowance

6. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claim 12 is the inclusion of the limitations that: said first storing device is a memory card for storing said encrypted MIDI music

playing data file, and wherein the electronic musical apparatus further includes a further encrypting device that again encrypts said decrypted MIDI music playing data file and a third storing device that stores the again encrypted MIDI music playing data file and wherein said encrypted music playing data file stored in said memory card is deleted as said again encrypted music playing data file is stored in said third storing device. It is these limitations found in the claim, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make this claim allowable over the prior art.

The primary reason for the allowance of claims 13 and 14 is the inclusion of the limitations that: encrypting said decrypted MIDI music playing data file; storing the again encrypted MIDI music playing data file in a third storing device; and deleting said encrypted MIDI music playing data file stored in said memory card as said again encrypted music playing data file is stored in said third storing device. It is these limitations found in each of the claims, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make these claims allowable over the prior art.

The primary reason for the allowance of claim 15 is the inclusion of the limitations of: a second encrypting device which again encrypts the decrypted music playing data file decrypted by said first decrypting device using a second encryption key; a second storage medium which stores the again encrypted music playing data file encrypted by said second encrypting device; a first deleting device which deletes the encrypted music playing data file stored in said first storage medium in response to said again encrypted

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music playing data file being stored in said second storage medium; a second decrypting device which again decrypts said again encrypted music playing data file stored in said second storage medium using a second decrypting key which corresponds to said second encrypting key. It is these limitations found in the claim, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make this claim allowable over the prior art.

Response to Arguments

7. Applicant's arguments received 05/28/07 with respect to claims 1-9 and 11-15 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-9 and 11 are rejected as new prior art references (U.S. Pat. No. 6346667 to Ishii, U.S. Pat. No. 6798885 to Malcolm and U.S. Pat. No. 5805545 to Nakamaru et al.) have been found to teach the claimed invention. Detailed response is given in sections 2-3 as set forth above in this Office Action.

Claims 12-15 contain allowable subject matter as indicated in section 6 above.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone

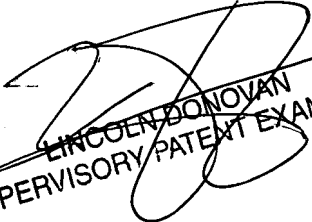
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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin
Examiner
Art Unit 2837

JQ 50


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER